What is claimed is:

1.   A data transfer method comprising the steps of:

identifying first and second access commands; and

acquiring speculative data in conjunction with an execution of the first

access command in lieu of executing the second access command

when the utility of the acquired speculative data is greater than the

utility of executing the second access command.

2.   The method of claim 1, in which acquiring the speculative data in

conjunction with an execution of the first access command is determined by steps

comprising:

ascertaining the second command is a write-back access command;

deciding a data following the first command has a heightened opportunity

of servicing a future request for data; and

deducing a time period for acquiring the data following the first command.

3.   The method of claim 2, in which the decision that the data following

the first access command is data having the heightened opportunity for servicing

the future data request is based on an analysis of previous read accesses in

conjunction with an analysis of read access commands present in the memory, and

in which the deduced time period is a period of time based on a time to acquire a

predetermined amount of data.

4.   The method of claim 3, in which the first access command is a read

command, and in which the deduced time period commences with the conclusion

of execution of the read command, extends beyond a latency period for the write-

back command and concludes with a commencement of sufficient time for

execution of a third access command.

5.   The method of claim 4, in which the first access command precedes

and is directly adjacent the second access command in an execution sequence.

6.   The method of claim 4, in which the first access command precedes and is nonadjacent the second access command in an execution sequence.

5   7.   The method of claim 2, in which the first access command is a read access command, and in which the heightened opportunity of servicing the future request for data is an opportunity of servicing a future request for data, and further in which the deduced time period commences with the conclusion of execution of the read access command and concludes with preservation of sufficient time for executing the write-back access command, wherein the read access command

10   precedes and is directly adjacent the write-back access command in an execution sequence, and further wherein the decision that the data following the read access command is data having the opportunity for servicing the future data request is based on an analysis of previous read accesses in conjunction with an analysis of read access commands present in a memory.

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8.   The method of claim 2, in which the heightened opportunity of servicing the future request for data is a minimum opportunity of servicing a future request for data, and in which the deduced time period is zero, wherein the decision that the data following the first access command is data having the

20   minimum opportunity for servicing the future data request is based on an analysis of previous read accesses in conjunction with an analysis of read access commands present in a memory.

9.   The method of claim 2, in which the deduced time period for

25   acquiring the data following the first access command is determined by a resolution of an amount of data following the first access command to be acquired.

10.   The method of claim 9, in which resolution of the amount of data following the first access command to be acquired is resolved to be a

30   predetermined constant amount of data.

11.   The method of claim 9, in which resolution of the amount of data following the first access command to be acquired is resolved to be a percentage of a buffer segment of a memory.

5   12.   The method of claim 9, in which resolution of the amount of data following the first access command to be acquired is resolved based on an analysis of previous read accesses in conjunction with an analysis of read access commands present in a memory.

10   13.   The method of claim 9, in which resolution of the amount of data following the first access command to be acquired is resolved based on an amount of remaining space within a buffer segment of a memory.

14.   The method of claim 2, in which the deduced time period for
15   acquiring the data following the first access command is a deduced amount of data determined by a latency period associated with a scheduled access command.

15.   The method of claim 14, in which the deduced amount of data following the first access command to be acquired is determined by a time period
20   that commences with the conclusion of execution of the first access command and concludes with a preservation of sufficient time for execution of the scheduled access command.

16.   The method of claim 14, in which the deduced amount of data
25   following the first access command to be acquired is determined by a time period that commences with the conclusion of execution of the first access command, continues with exhaustion of an access time and an execution time for the scheduled access command and concludes with a preservation of sufficient time for execution of third access command.

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17.   The method of claim 1, in which the first access command is a read access command, the speculative data is a read on arrival data and wherein the method further comprises steps of:

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preparing a read/write channel electronics for execution of the read access command;

executing the read access command; and

acquiring the read on arrival data in conjunction with the execution of the

5   read access command.

18.   The method of claim 1, in which the first access command is a write-back access command, the speculative data is a read on arrival data and wherein the method further comprises steps of:

10   preparing a read channel for execution of the write-back access command;

executing the write-back access command; and

acquiring the read on arrival data in conjunction with the execution of the

write-back access command.

19.   A method comprising the steps of:

identifying a first and second access commands;

ascertaining the second pending command is a write-back access command

with an access period;

deciding a data preceding the first access command has a heightened

opportunity of servicing a future request for data; and

acquiring the data preceding the first command for a period beyond the

access period of the write-back access command.

20.   A data storage device comprising

a head disc assembly with stored data;

a controller communicating with a head disc assembly; and

a read look ahead extension routine programmed into the controller, the

5   read look ahead extension routine acquires data from the stored data

        as a speculative data by steps for acquiring speculative data.